

### ABSTRACT OF THE DISCLOSURE

An apparatus and method for measuring the potential of a voltage source in a measured circuit having an impedance in the measured circuit. A voltage measuring circuit having an input impedance includes a switchable impedance network for varying  
5 the input impedance to a plurality of input impedance values. A microcontroller is connected to the voltage measuring circuit and switches the input impedance, records measured potentials at a plurality on input impedances, solves simultaneous equations, describing the connected measured and voltage measuring circuits, for the potential of the voltage source, and outputs a signal representing the potential of the voltage source.